RESPIRONICS®

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RESPIRONICS®

EverGo™

USER MANUAL

DirectHome MEDICAL
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Introduction

Intended Use

The EverGo Portable Oxygen Concentrator is intended for prescription use by patients requiring high concentrations of oxygen on a supplemental basis. It is small, portable and is capable of continuous use in home, institutional, and travel / mobile environments.

Contraindications

- This device is not intended to be life-sustaining or life-supporting.
- This device is not intended for use with humidifiers.
- This device is not intended for pediatric use.

Description

The EverGo™ Portable Oxygen Concentrator, its features, and its accessories are described in detail in this manual. Read and understand it completely before operating the device.

This manual applies to the following products:

- EverGo Portable Oxygen Concentrator Device in Carrying Case*
- AC Power Supply
- AC Power Cord
- DC Power Cord
- Rechargeable Lithium Ion Battery
- Air Inlet Filter
- Accessory Bag

> **** Warning: Do not attempt to remove the EverGo carrying case unless instructed to do so by airport security officials during air travel. Do not attempt to operate the EverGo without the carrying case. The EverGo cannot be operated safely without it. See the Traveling section in this manual for more information.***

For the mobile cart, see the instruction sheet that is packaged with it.

This manual does not apply to the following accessory items sold separately:

- Standard Single Lumen Nasal Cannula
- EverGo Smart Battery Charger/Recalibrator

EverGo System

The device comes with the following items. If any are missing, contact your equipment provider.

- EverGo Device in Carrying Case with Detachable Handle and Shoulder Strap

- This User Manual
- Rechargeable Batteries (2)

- Air Inlet Filters (2)
  (located in zippered pouch on side of bag)

- AC Power Supply and Cord

- DC Power Cord

- Accessory Bag

- Mobile Cart

Warnings and Cautions

Caution! U.S. federal law restricts this device to sale by or on the order of a physician.

Warnings

A warning represents the possibility of harm to the operator or patient.

- The operator should read and understand this entire manual before using the device.
- The device is not intended for life support. Where the prescribing health care professional has determined that an interruption in the supply of oxygen, for any reason, may have serious consequences to the user, an alternate source of oxygen should be available for immediate use.
- Geriatric or any other patient unable to communicate discomfort, or hear or see the alarms while using this device, may require additional monitoring.
- Oxygen supports combustion. Oxygen should not be used while smoking or in the presence of an open flame.
- Do not use the device in the presence of a flammable anaesthetic mixture in combination with oxygen or air, or in the presence of nitrous oxide.
- Do not use oil or grease on the concentrator or its components as these substances, when combined with oxygen, can greatly increase the potential for a fire hazard and personal injury.
- If you notice any of the following, discontinue use and contact your home care provider:
  - unexplained changes in the performance of this device
  - unusual or harsh sounds
  - dropped or mishandled device or the power supply
  - water spilled into the enclosure
  - broken enclosure
- Use only with Respironics EverGo AC power supply.
- Use only with Respironics EverGo batteries.
- Use only approved EverGo accessories.

Warnings (continued)

- Repairs and adjustments must be performed by Respironics authorized service personnel only. Unauthorized service could cause injury, invalidate the warranty, or result in costly damage.
- Periodically inspect electrical cords, cables, and the power supply for damage or signs of wear. Discontinue use and replace if damaged.
- To avoid electric shock, unplug the device and remove the batteries before cleaning the bag. DO NOT immerse the device in any fluids.
- Your home care provider is responsible for performing appropriate preventive maintenance at the intervals recommended by Respironics.
- For proper operation, your device requires unobstructed ventilation. Always make sure filters and other openings in the case are not obstructed by items which may impede ventilation. Do not place the device in a small closed space (such as a closet).
- Do not use an extension cord.
- Device operation above or outside of the voltage, breath rate, temperature, humidity and/or altitude values specified may decrease oxygen concentration levels.
- Never drop or insert any object into any opening.
- Be aware that the electrical cord and/or tubing could present a tripping or strangulation hazard.
- Do not attempt to remove the EverGo carrying case unless instructed to do so by airport security officials during air travel. Do not attempt to operate the EverGo without the carrying case. The EverGo cannot be operated safely without it. See the Traveling section in this manual for more information.
- Use only power cords supplied by Respironics for this device. Use of power cords not supplied by Respironics may cause overheating or damage to the device.

Cautions

A caution represents the possibility of damage to the equipment.

- Do not immerse the device or allow any liquid to enter the enclosure.
- When the device is used in an automobile, disconnect it from the DC auto adapter outlet when the automobile is turned off. Do not operate the device in a non-running vehicle for an extended period of time, as this may deplete the vehicle's battery and prevent the vehicle from starting. Do not allow the device to be connected to the auto adapter outlet while starting the automobile normally or while you are starting the automobile with battery recharging cables. Wait until the automobile starts before connecting the device to the DC power outlet. Secure the device securely when used in any moving vehicle. (The same cautions apply if using the DC adapter outlet on a boat or recreational vehicle.)
- Turn off the device before removing the last remaining battery. The device should not be operated without the batteries installed. If the device is operated without the batteries installed, the standard shut-down routine will not be implemented when the power is disconnected prior to turning off the unit. This can result in damage to the device.
- Only use the supplied handle and shoulder strap to carry your device. With every use, verify that the case, shoulder strap and handle are in good condition.

Note: Additional warnings, cautions, and notes are located throughout the manual.

Symbol Key

	Follow instructions for use	**REF**	Model number
	No smoking	**SN**	Serial number
	No oil or grease		Class II equipment
	Keep away from open flames		Canadian/US Certification
	Do not disassemble	IPX1	Drip proof equipment
	DC power		Rechargeable battery
	Caution! U.S. federal law restricts this device to sale by or on the order of a physician.		

Note: See also the section on alarm indicators and screen symbols.

How to Contact Respironics

If you need to contact Respironics directly, call the Respironics Customer Service department at 1-800-345-6443 (US and Canada only) or 1-724-387-4000. You can also use the following address:

Respironics, Inc.
1001 Murry Ridge Lane
Murrysville, PA 15668
USA

Visit the EverGo web site at: www.evergo.respironics.com

Getting Started

Attach the carrying handle and shoulder strap to the carrying case.

Before using the EverGo device for the first time, the EverGo batteries require an initial uninterrupted charging time of 4 hours minimum. This can be accomplished by installing the batteries and using the AC Power Cord, as described in the following pages.

Note: Respironics does not recommend using DC power for this initial charging.

Caution: Use only Respironics batteries in your EverGo device. Using other batteries could damage the device and will void the warranty.

Battery Duration Times

EverGo's two-battery system gives it long operation duration times. For example, at a setting of 2 and 20 breaths per minute (BPM) with 2 fully charged batteries, the device can be expected to run for 8 hours. Likewise, under similar circumstances at a setting of 4, 5, or 6, it can run for 4 hours.

The following table shows the approximate duration of use at 20 BPM. Your times may vary based on your activity level and the condition of the batteries.

Flow Setting	Breath Rate of 20 BPM (2 batteries)	Breath Rate of 20 BPM (1 battery)
1	12 hours	6 hours
2	8 hours	4 hours
3	6 hours	3 hours
4	4 hours	2 hours
5	4 hours	2 hours
6	4 hours	2 hours

Table 1. Approximate duration of the EverGo device operating with two or one fully charged batteries.

Inserting the Batteries

Your EverGo device comes with two lithium ion batteries. To insert them correctly, follow these steps.

1. Place your device in a well ventilated location.

   Note: The EverGo device is shipped from the factory with both batteries removed.

   Caution: Open the carrying case only when EverGo is turned off. Never open the case while the unit is operating.

2. Open the top of the carrying case using the zipper located underneath the flap surrounding the top part of the case, as shown here. If the device has been operating, the surfaces inside may be warm to the touch. This is normal.

Figure 1. Opening the carrying case

3. Check the fuel gauge for each battery. To do so, press the white button (shown below) on the battery and watch how many LEDs light up. If the batteries are low, you can recharge them. See page 10.

No. of LEDs	Battery Charge
4 LEDs Light:	75% to 100% full
3 LEDs Light:	50% to 75% full
2 LEDs Light:	25% to 50% full
1 LED Lights:	10% to 25% full
1 LED Blinks 3 Times:	Battery is less than 10% full and needs to be recharged

Table 2. Battery Charge Level

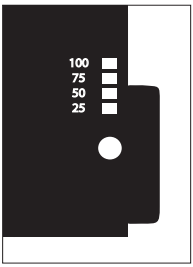


Figure 2. Battery Fuel Gauge and White Button

4. Gently insert both batteries into the battery compartments located on top of the device. Before inserting each battery, be certain that the battery connector on the bottom of the battery lines up with the arrow located next to the battery slot and **the Respironics logo faces the inside of the device**. Pull back the plastic retainer to allow the battery to fit properly.

Figure 3. Inserting the primary battery.

5. You may remove or insert your secondary battery using the small flap on the top of the carrying case to gain access to the battery compartment, shown here. Refer to the diagram under the flap which shows how the battery is inserted. **Again, the Respironics logo should face the inside of the device.**

Figure 4. Inserting the secondary battery.

6. After the batteries are inserted, check to make sure each one is level with or slightly below the top of the plastic case. When fully inserted, the plastic retainer tab holds the battery in place. If either battery extends above the top gray surface, it may be in backwards. Remove it and insert it correctly. Do not force the battery.

7. Zip the case closed and keep it zipped during use.

8. Touch the screen once to verify that the battery symbols are visible. If you do not see battery symbols, one or both batteries have been inserted incorrectly. Reinsert them if necessary.

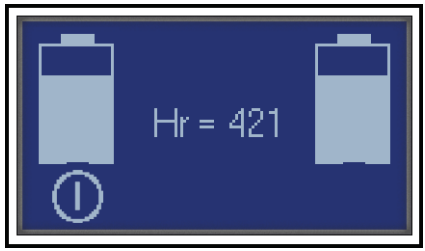


Figure 5. Typical startup screen showing 2 batteries, each 3/4 full, and with 421 hours of device usage.

Charging the Batteries with AC Power Supply

Important: The first time you charge the batteries, be sure to charge them fully. Do not use the DC power cord to do so; instead use AC power.

Note: The batteries will begin charging whenever you connect the device to an AC outlet, even if you're using it.

To charge the batteries using the AC Power Cord provided with your system, follow these steps.

1. Connect the output cable of the AC Power Supply to the EverGo power inlet.
2. Connect the connector of the AC Power Cord into the AC power supply.
3. Connect the plug of the AC Power Cord into an AC outlet installed to meet national or regional electrical code.

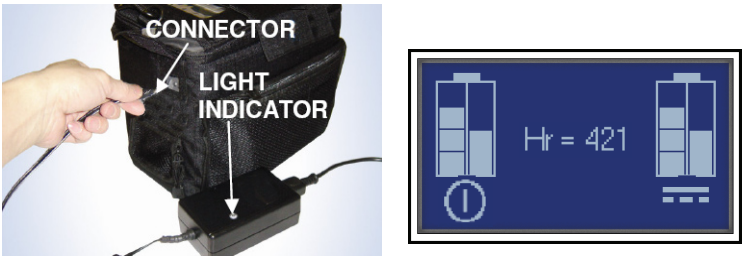


Figure 6. Connecting the power cord to the connector located under the Velcro flap. A typical battery charging screen is shown on the right

Note: As soon as you connect the device to an energized AC power source, the light on the AC Power Supply will light up and the cooling fan will come on. This is normal. The fan will run the entire time it is charging to keep the batteries cool.

4. When charging is complete (this takes a minimum of four hours for first use), disconnect the AC Power Supply and store it with the AC Power Cord for future use.

Note: Replacement and spare batteries are available separately. For information, contact your home care provider or see the EverGo web site at www.evergo.respironics.com

Note: An optional EverGo Smart Battery Charger/Recalibrator (sold separately) is available for your system. For more information, contact your home care provider or see the Respironics EverGo web site at www.evergo.respironics.com

Operating the EverGo Device

Warning: Do not use the device without at least one battery installed and operating.

- To run the device on battery power, make sure one or both batteries are properly inserted and sufficiently charged. (The batteries should be fully charged the first time you use them.)
- To run the device using AC power, make sure you have at least one battery installed. Follow these steps:
  1. Connect the output cable of the AC Power Supply to the EverGo power inlet.
  2. Connect the connector of the AC Power Cord into the AC power supply.
  3. Connect the plug of the AC Power Cord into an AC outlet installed to meet national or regional electrical code.

  Note: The AC Power Supply is equipped with a green light, which illuminates when it is connected to an energized AC power source.

- To run the device using DC power from an automobile or other motorized vehicle, make sure you have at least one battery installed. Start the vehicle and connect one end of the DC Power Cord to the device's power inlet and the other end into the vehicle's DC electrical outlet.

Back Up Breathing

When you turn on your EverGo device, it will sense if you are breathing from it. If you are not yet breathing through the cannula, EverGo will begin to pulse automatically about once every five seconds. The only purpose of this "back up breathing" is to help the unit warm up faster. As soon as you begin breathing through the cannula, the device will begin delivering pulses based on your breathing. Back up breathing occurs only when you first turn on the device. **You may begin breathing from the EverGo at any time.**

Getting Started

To start your EverGo device, follow these steps. (To learn about the touch screen displays, turn to page 14.)

Figure 7. The nasal cannula is connected to the oxygen outlet port on top.

1. Connect a nasal cannula to the oxygen outlet on top of your device, as shown in Figure 7.

   Note: A standard single lumen nasal cannula and tubing (not supplied) should be used to deliver oxygen from the EverGo device. The device works with cannula tubing up to 30 ft. (9 m).

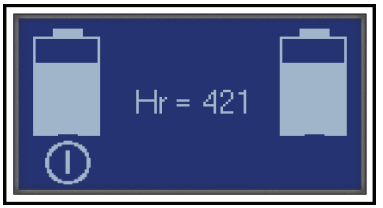


Figure 8. Touch the on/off symbol to start. The number on the screen (i.e. Hr = 421) shows the number of hours this unit has been operated.

2. To turn on the device, gently touch the screen shown in Figure 8. This first touch brings the screen to life and shows the on/off symbol, battery status, and hour meter.

3. Gently touch the on/off symbol ⏻ to turn on the device. This "double touch" feature helps prevent unwanted starts or inadvertent changes in oxygen flow.

   You may touch anywhere on the screen as your first touch. The second touch must be on the on/off symbol ⏻ within 5 seconds or the screen will turn off.

   Note: If you touch the exact same spot twice, your device will not start. This feature reduces the chances that the device will be started by mistake.

   Every time it starts up, the device quickly starts producing higher oxygen concentration levels, but does not reach its specified purity for ten minutes. The flow rate number will blink until it reaches oxygen purity specifications. You may begin breathing from your unit immediately after starting the device.

4. To set the device's flow setting, first touch the large number (such as the 2 shown in Figure 9) in the center of the screen.

Figure 9. Touch the number to change the flow setting.

5. Each time you press the flow setting number, an up arrow and/or down arrow will appear on the screen. (Examples are shown in Figures 16-17). To increase the flow setting, press the up arrow. To decrease the flow setting, press the down arrow.

   The device can be set to: 1, 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, and 6.

   Warning: It is very important to set your device to your prescribed level of oxygen flow. Do not increase or decrease your flow rate from your prescribed level until you first consult with your physician.

   Note: When it is turned on, the device will automatically start at the flow rate setting used when the device was last turned off. As a precaution, each time you start the unit, verify the flow setting.

6. Position the nasal cannula on your face, as shown below, and breathe normally through your nose.

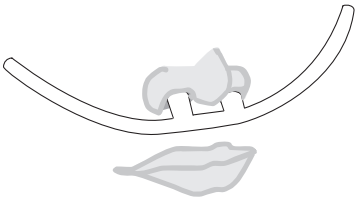


Figure 10. Correct position of cannula on your face.

Operating the Touch Screen

You can change all device settings by gently touching the display screen, including starting the device, stopping it, silencing an alarm, and changing oxygen flow. The figures that follow explain the displays on your touch screen.

The symbols and alarms shown on these screens are discussed in detail in pages 18-22 of this manual. Familiarize yourself with these pages before using the device.

Note: Because all interaction with your EverGo device is through this touch-sensitive interface, there are no knobs to turn or buttons to push. Simply touch the screen gently to operate the device.

To start the device, touch anywhere on the blank screen. After the first touch, you will see a screen similar to the one shown below.

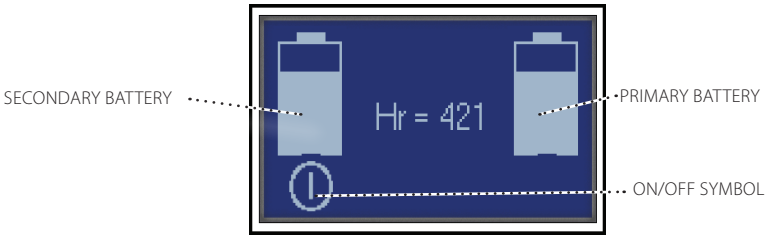


Figure 11. Typical display after the first touch. Now touch the On/Off symbol shown above. Next, you will see the screen below, which indicates that the system is starting up.

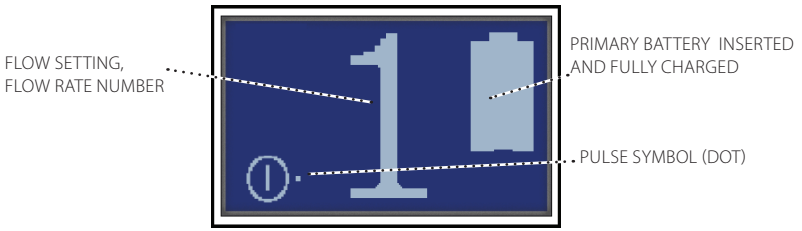


Figure 12. Typical display when the device is turned on. This screen shows that the flow setting is 1, and that the primary battery is inserted and fully charged. Because there is no symbol for the secondary battery on the left, this means the secondary battery is not inserted.

When you turn on your EverGo, the flow rate number will begin to flash because the unit has not yet reached specified oxygen purity level. It should take ten minutes or less to reach the specified oxygen purity levels. It is safe to begin breathing from the EverGo device immediately. Breathing from the unit will cause the unit to reach oxygen purity levels faster than ten minutes.

The dot next to the on/off symbol is the pulse symbol. It appears whenever you take a breath and the unit delivers a pulse of oxygen.

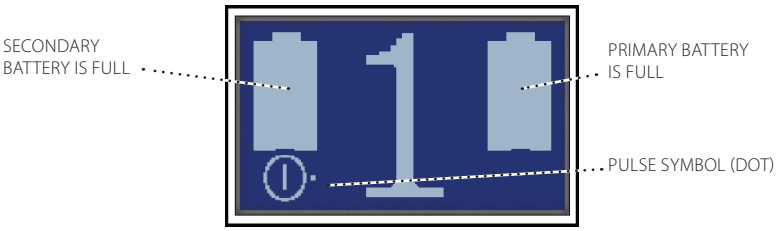


Figure 13. This screen shows a flow setting of 1. The primary battery is inserted correctly and fully charged, and the secondary battery is inserted correctly and fully charged.

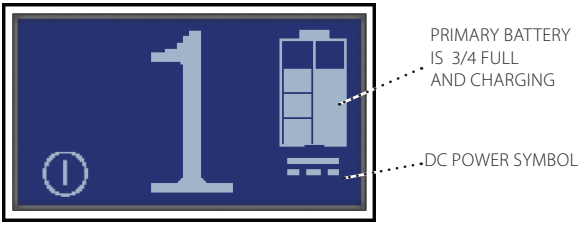


Figure 14. This typical display shows the flow setting is 1, the primary battery (which is 3/4 or 75% charged) is inserted, and the device is connected to a power source. The secondary battery is not inserted.

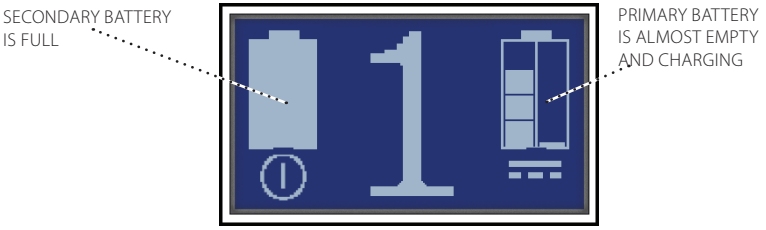


Figure 15. This display shows that two batteries are inserted. It also shows that the unit is connected to a power source. The secondary (left) battery is fully charged. The primary (right) battery is nearly empty and charging.

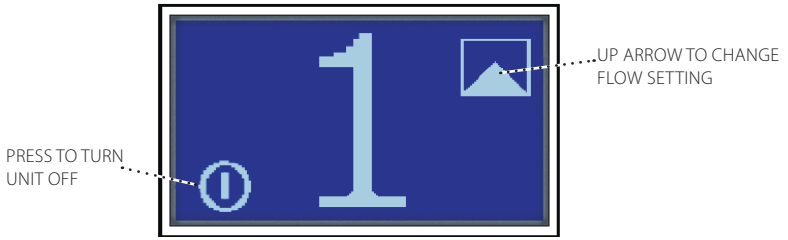


Figure 16. To change the flow setting, touch the setting number. (Here, it is the number 1.) This causes the up flow change arrow to appear. To increase the flow setting, press the up arrow until you reach your prescribed setting. The flow setting arrow disappears 5 seconds after you touch it. For another example of the flow change arrows, see the next figure.

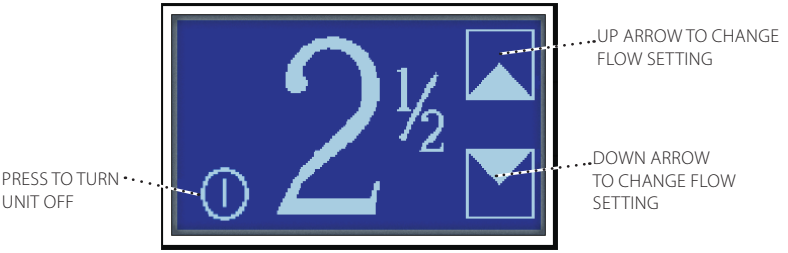


Figure 17. To change the flow setting, touch the setting number; here it is 2 1/2. This causes the up and down arrows to appear. To increase the flow setting, press the up arrow on the right until you reach your prescribed setting. To decrease your flow setting, press the down arrow. The flow setting arrows disappear when you touch the number again or 5 seconds after you last touched the screen.

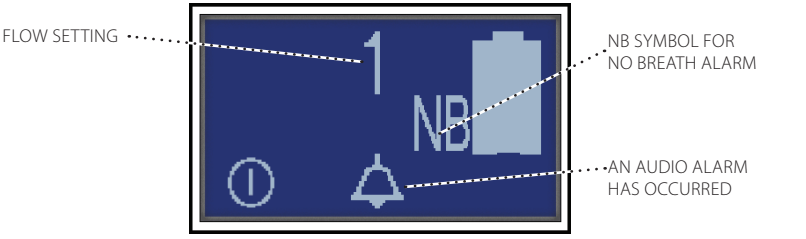


Figure 18. Example of an alarm screen. If the device does not detect breathing for 120 seconds, it will sound the NB alarm and show this typical display with the NB alarm symbol (NB = No Breath). The alarm symbol (bell) shows the audio alarm is on. To silence the audio alarm, press the alarm symbol. For a complete list of alarms, see page 19.

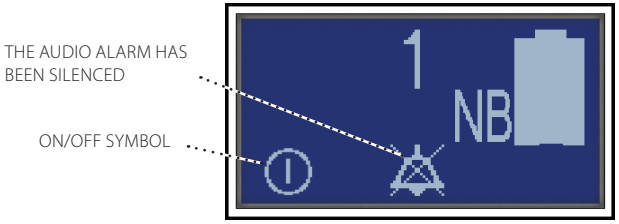


Figure 19. After pressing the alarm symbol (the bell), the audio alarm is silenced, though the alarm symbol remains on the screen as long as the condition remains. To correct an NB alarm, check your cannula tubing for kinks. For details about alarms, see page 19. To turn off the device, press the on/off symbol and then press the on/off symbol again as described in the next figure.

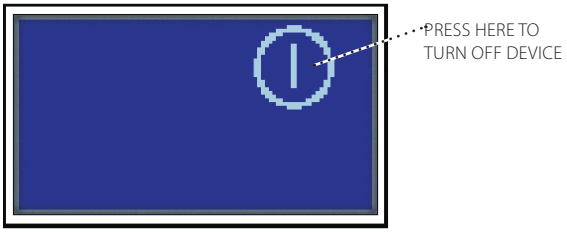
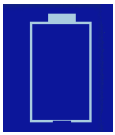


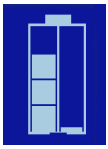
Figure 20. Typical display after touching the On/Off symbol on the previous screen to turn off the device. You must press this symbol again, on this screen, to turn off this device. If this symbol is not pressed within 5 seconds, the previous screen will reappear and the device will remain on.

Note: To stop the device, gently touch the on/off symbol twice, once on each of the last two screens (Figures 19-20). This "double touch" feature helps prevent unwanted stops or starts.

Alarm Indicators and Screen Symbols

Visual, Audio Indicators	Description	What To Do
   3 short beeps + 1 long beep	**No Breath Alarm** This alarm occurs when a breath is not detected for a period of 2 minutes (120 seconds) or more. This alarm can be silenced by pressing the Alarm symbol (the bell symbol) shown on the screen. This alarm becomes silent as soon as a breath is detected. If no breath is detected after approximately 30 minutes, the unit shuts down to conserve power. (This alarm is inactive for ten minutes after startup.)	Check the connection from the cannula to the device. Make sure the nasal cannula is properly positioned on your face and that you are breathing through your nose. Make sure the cannula tubing is not kinked or obstructed.
   3 long beeps + 1 short beep	**Oxygen Concentration Alarm** This alarm occurs when the device is delivering a lower concentration of oxygen than specified. This alarm can be silenced by pressing the Alarm symbol (the bell symbol shown on the screen).	Change to another source of oxygen and contact your equipment provider.
   1 long beep after 2 minutes	**High Breath Rate Indicator** This indicator indicates that the user's breath rate is exceeding the capacity of the device. The device is still working properly and is still providing oxygen at a rate of 1.05 liters per minute. The beeps can be silenced by pressing the Alarm symbol (the bell symbol shown on the screen).	The indicator resets itself when breath rate is reduced. If this indicator occurs on a routine basis, contact your home care provider.

Visual, Audio Indicators	Description	What To Do
   3 short beeps + 3 long beeps	**Technical Fault Alarm** This alarm occurs when: a) the battery runs out or b) the device has a general malfunction and the unit is no longer operating properly. The device may or may not shut down depending on the severity of the alarm.	Recharge the batteries and try to restart the device. If this alarm occurs again, change to another source of oxygen and contact your home care provider.
	Alarm Silenced Symbol This symbol appears when you press the bell symbol to silence the audible alarm (beeps).	No further action is needed.
	Attention This symbol appears when corrective action is required.	Allow the unit to warm up. If this alarm continues, contact your home care provider.
(Symbol flashes)  1 short beep	**Low Battery Alarm** The battery symbol flashes when approximately 17 minutes of battery life remains for the primary or secondary battery. Remaining battery life is dependent on your device settings and your activity level.	Replace the battery or connect to a power source. (Press bell symbol to silence the alarm.)

Visual, Audio Indicators	Description	What To Do
(Symbol flashes) Alternating short and long beeps	**Depleted Battery Alarm** This battery symbol flashes when approximately two minutes of battery life remains for the primary or secondary battery.	Replace or recharge battery. (Press bell symbol to silence the alarm.)
	**Battery Charging While Almost Empty Symbol** This battery symbol appears (with the charging bars scrolling) when the battery is almost depleted and recharging.	No action needed.
	Battery Charging While Partly Full Symbol When a battery symbol similar to this appears (with the charging bars scrolling on the left and at mid-height on the right), the battery is partly full and recharging.	No action needed.
 1 long beep	**Battery Charge Complete Symbol** This battery symbol appears when the battery is fully charged.	No action needed.

Visual, Audio Indicators	Description	What To Do
	DC Power Connection Symbol This symbol appears when the device is connected to an AC or DC power source.	No action needed.
(Power Connection Symbol Disappears) 1 short beep	The Power Connection symbol disappears when the device is disconnected from the AC or DC power source.	No action needed.
 1st press = 1 long beep. 2nd press to turn device OFF = 3 long beeps	**On/Off Symbol** This symbol appears when the device is powered ON, or is ready to be turned ON or OFF.	Touch this symbol to turn the device on or off. Note: To prevent inadvertent starts and stops, the device requires two touches of the screen to turn it on and off.
	Pulse Symbol The dot next to the On/Off symbol appears when the unit delivers a pulse, whenever you take a breath.	No action needed.

Visual, Audio Indicators	Description	What To Do
 1 short beep	**Flow Control Setting** The large number in the center of the screen shows the oxygen flow setting. (In this example, it is shown as 2.) This number can range from 1 to 6 in increments of one-half: 1, 1½, 2, 2½, etc.	**If this is your flow setting**, no action is needed. **If this is not your proper flow setting**, touch the number to activate the arrows (shown below).
(Symbol flashes) 	**Warm Up Indicator** When the Flow Control Setting number (shown here as 2) is blinking or flashing, it means the EverGo device is warming up. It will stop flashing when it is producing oxygen at normal purity levels, approximately 10 minutes after startup.	Breathe from the EverGo device normally. Breathing from the device causes it to reach purity levels faster than 10 minutes.
 1 short beep	**Flow Control Change Arrows** These arrow symbols appear after you touch the flow control setting number. They allow you to change the flow control setting.	Touch the **top** arrow to increase the flow control setting. Touch the **bottom** arrow to decrease the flow control setting.

TROUBLESHOOTING

The table below shows a list of common problems and actions you can take. If you are unable to resolve a problem, please contact your home care provider.

Problem	Possible Cause	What You Should Do
Device Won't Turn On	Batteries are depleted.	Use the AC or DC power cords to operate the device (with the batteries inserted) to recharge the batteries. If this does not resolve the problem, contact your home care provider.
	Batteries are not installed correctly.	Remove the batteries and install them correctly.
	Screen not touched twice.	Touch the blank screen and then touch the On/Off symbol shown on the next screen.
Device Will Not Trigger A Pulse Of Oxygen	EverGo is not turned on.	Touch the blank screen and then touch the On/Off symbol shown on the next screen.
	Cannula tubing is kinked or twisted.	Make sure the tubing is connected properly to the oxygen outlet port and that it is free of any obstruction.
	Device malfunction.	Contact your home care provider.
Oxygen Not At Full Concentration	Device is warming up.	Wait 10 minutes for the device to deliver oxygen at the prescribed concentration. If the condition persists, contact your home care provider.
Alarm Occurs	The device needs your attention.	See pages 18-22 for information about specific alarms and what you should do.

Caring for your Batteries

Handle your batteries with care.

- Do not allow a battery's terminals to touch together as this will cause the battery to fail.
- Do not immerse a battery in water.
- Do not disassemble or deform a battery.
- Do not expose to, or dispose of, a battery in fire.
- Avoid exposing a battery to excessive physical shock or vibration (dropping, etc.).
- Keep all batteries out of the reach of children.
- Do not use any battery that has been damaged in any way.
- Always charge the batteries in accordance with the manufacturer's instructions, using specified chargers only.
- Do not use modified battery chargers.

Battery Storage

Lithium ion batteries can be stored from -4° F (-20° C) to 140° F (+60° C) at up to 80% relative humidity. However, they are best stored below 70° F (21° C) in a cool, dry, well-ventilated facility free from corrosive gas or vapor.

Storage at temperatures above 113° F (45° C) **such as in a hot car** may degrade battery performance and reduce battery life. Storage at low temperatures may affect initial battery performance.

Caring for your EverGo Device

Cleaning the Air Inlet Filter

Respironics recommends that you clean the air inlet filter weekly. Wash the air inlet filter, located in the zippered compartment on the end of the device case. Your home care provider may advise you to clean it more often depending on your operating conditions.

Follow these steps to properly clean the air inlet filter.

Figure 21 Removing the air inlet filter for cleaning.

1. Remove the filter, as shown above, and wash it in a solution of warm water and mild liquid dish detergent.
2. Rinse the filter thoroughly in warm water. Remove excess moisture by placing the filter in a soft absorbent towel and gently squeezing the filter dry. **Allow it to air dry thoroughly.** Ensure that the filter is **completely dry** before putting it back in the device.

   If you have a second air inlet filter on hand, insert this clean, dry filter into the carrying case while cleaning the dirty filter.
3. Place the **dry filter** in the zippered compartment and zip the compartment shut.

   Caution: Do not operate the device without the air inlet filter in place.

Cleaning the Carrying Case

If cleaning is necessary, use only warm water and a mild liquid dish detergent.

1. Make sure the carrying case is closed.
2. Dampen a cloth in the detergent and water solution and wipe the outside surfaces of the case clean.

Warning: Do not use alcohol, solvents, polishes or any oily substances on the device, as they are flammable.

Caution: Do not allow liquids into any of the controls, the interior of the case, or the oxygen tubing connector. Should this happen, contact your home care provider for assistance.

Device Storage

Store your device in a place where it will remain clean and dry.

Caution: Do not store your device or accessories in extreme temperatures, below -4° F (-20° C) or above 140° F (60° C).

Warning: The device should always be stored with the carrying case. The only time the carrying case should be removed is during air travel, if requested by airport security personnel. See the Traveling section in this manual for more information.

Device Disposal

Dispose of the device in accordance with local regulations or contact your home care provider.

Traveling With Your System

With your EverGo system and proper advance planning, you can enjoy traveling within your community and beyond. Before you leave, make sure you pack the following:

- Fully charged batteries (and extra batteries for a long trip)
- AC power supply and connector cord
- DC power cord

Also, be sure to take the telephone numbers of your home care provider and physician in case of an emergency.

By Air

> ***Note: Every airline has policies for travel with portable oxygen concentrators such as your EverGo device. Some airlines do not permit their use while flying on their aircraft. When you make your reservation, be sure to ask the airline for their policy regarding use of your EverGo during flight. For updated information about air travel with your EverGo device, visit our web site: www.evergo.respironics.com.***

When flying in the U.S. and abroad, commercial airlines may have unusual requirements for oxygen concentrators. Before you fly, contact all of your airlines on each of your connecting flights for permission to carry your EverGo system on board. Be sure to ask about any documentation you may need to bring with you.

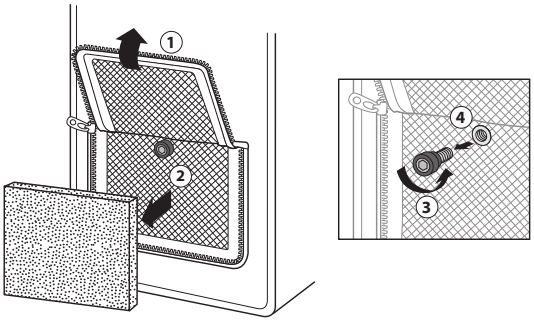
Make sure your batteries are fully charged and that you have enough battery power for the duration of your flight. If your airline allows you to connect to airline power source, be sure to remove both batteries before connecting to the EverGo.

On the day of your flight, plan to arrive early. Airport security officers may need extra time to clear your luggage and oxygen system. They may also ask you to remove the carrying case from the EverGo device for inspection.

Traveling (continued)

> ***Note: DO NOT remove the EverGo carrying case until a security officer specifically instructs you to do so.***

If a security officer requests that you remove the carrying case, please do the following:



1. Unzip the filter compartment on the side of the case.
2. Carefully remove the filter.
3. Using your fingers, unscrew the thumb screw located under the filter.
4. Remove the thumb screw. Put it in a safe place.
5. Gently remove the device for inspection.

After inspection, immediately do the following:

1. Replace the device in the carrying case. Make sure the display will show through the window on the case.
2. Push the thumb screw through the mesh and into the screw hole.
3. Using your fingers, screw in the thumb screw until it is secure.
4. Carefully replace the filter.
5. Close and zip the filter compartment on the side of the case.

> ****Warning: Do not attempt to remove the EverGo carrying case unless instructed to do so by airport security officials during air travel. Do not attempt to operate the EverGo without the carrying case. The EverGo cannot be operated safely without it.***

Traveling (continued)

By Motor Vehicle

Use the EverGo DC power cord to plug in your system using the vehicle's cigarette lighter or DC power input. Whenever the EverGo system is running from a DC power source, the batteries installed in your unit will begin recharging. You can also use the EverGo device while it is running from a DC power source.

> ***Caution: Make sure the vehicle has been started before plugging in your DC power cord. If you operate the EverGo system using the DC power cord while the vehicle engine is turned off, you could inadvertently drain the vehicle's battery.***

By Bus or Train

Most bus and train lines allow passengers to use portable oxygen concentrators, but you may need to notify them in advance. When you make your travel arrangements, well before your departure, contact your carrier for permission to bring your system and use it on board.

> ***Note: Bus and rail carriers outside the United States may have additional requirements for oxygen concentrators. Contact them several weeks before you leave to identify any requirements or specifications that may require your attention.***

On Arrival

When you arrive at your destination, check the status of your system's batteries. This is an excellent time to recharge all batteries, so they're ready to go when you need them.

If you have any questions or concerns about traveling with your EverGo system, contact your home care provider.

SPECIFICATIONS

Operating Conditions	Operational temperature: 41° F to 104° F (5° C to 40° C) Relative humidity: 15% to 95% Altitude: up to 8,000 ft. (2,438 m)
Storage Conditions	-4° F to 140° F (-20° C to 60° C) - unit only Relative humidity: up to 95%, non condensing

EverGo Oxygen Concentrator

Oxygen Concentration*	89% - 3%/+6% at all settings
Flow Settings and Pulse Volumes	1 = 12 ml; 1½ = 18 ml; 2 = 23 ml; 2½ = 29 ml; 3 = 35 ml; 3½ = 41 ml; 4 = 47 ml; 4½ = 53 ml; 5 = 59 ml; 5½ = 64 ml; and 6 = 70 ml, up to a max of 1050 ml/min.
User Interface	Touch screen, back lit liquid crystal display (LCD)
Dimensions	12 in. x 6 in. x 8.5 in. (30.5 cm x 15.2 cm x 21.6 cm)
Weight	8.5 lbs. (3.8 kg) with 1 battery installed 10 lbs. (4.5 kg) with 2 batteries installed
Audio Alarm	50 decibels (nominal) at 39 in. (1 m)
Outlet Pressure	3 psi
*Based on an atmospheric pressure of 14.7 psia (101 kPa) at 70° F (21° C)	

EverGo Battery

Chemistry	Lithium Ion 14.4 VDC (nominal)
Dimensions	0.9 in. H x 6.6 in. L x 4.3 in. W (2.7 cm x 16.75 cm x 10.73 cm)
Weight	1.5 lbs. (0.7 kg)
Battery Duration	2 batteries: 8 hours (setting of 2 at 20 bpm) 1 battery: 4 hours (setting of 2 at 20 bpm)
Charge Time	Approximately 2-3 hours per battery from fully discharged to fully charged, depending on the power source and usage.

AC Power

Type	Respironics PN 900-105
Input:	100 to 240 VAC, 50/60 Hz, 1 A
Output:	18 VDC 5.0 A max
Power Consumption	110 W @ 100 VAC while charging 120 W @ 240 VAC while charging 70 W while not charging

DC Power

Input:	12-18 VDC 5.0 A max

Classification

The EverGo is classified as:

- IEC Class II Internally Powered Equipment
- Type BF Applied Part
- IPX1: Drip Proof Equipment
- Not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
- Continuous Operation

EMC Information

Guidance and Manufacturer's Declaration – Electromagnetic Emissions		
EverGo is intended for use in the electromagnetic environment specified below. The user of EverGo should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment - Guidance**
RF Emissions CISPR 11	Group 1	The Device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class B	The Device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations/Flicker Emissions IEC 61000-3-3	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
EverGo is intended for use in the electromagnetic environment specified below. The user of EverGo should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV Contact ±8 kV Air	±6 kV Contact ±8 kV Air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient/Burst IEC 61000-4-4	±2 kV for Power Supply Lines ±1 kV for Input/Output Lines	±2 kV for Power Supply Lines ±1 kV for Input/Output Lines	Mains power quality should be that of a typical home or hospital environment.
Surge IEC 61000-4-5	±1 kV Line to Line ±2 kV Line to Ground	±1 kV Line to Line ±2 kV Line to Ground	Mains power quality should be that of a typical home or hospital environment.
Voltage Dips, Short Interruptions and Voltage Variations on Power Supply Input Lines IEC 61000-4-11	<5% U_T (>95% Dip in U_T) for 0.5 Cycle 40% U_T (60% Dip in U_T) for 5 Cycles 70% U_T (30% Dip in U_T) for 25 Cycles <5% U_T (>95% Dip in U_T) for 5 Seconds	<5 % U_T (>95% Dip in U_T) for 0.5 Cycle 40 % U_T (60% Dip in U_T) for 5 Cycles 70 % U_T (30% Dip in U_T) for 25 Cycles <5 % U_T (>95% Dip in U_T) for 5 Seconds	Mains power quality should be that of a typical home or hospital environment. If the user of the Device required continued operation during power mains interruptions, it is recommended that the Device be powered from an uninterruptible power supply or battery.
Power Frequency (50/60 Hz) Magnetic Field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical home or hospital environment.
Note: U_T is the A.C. mains voltage prior to application of the test level.			

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

EverGo is intended for use in the electromagnetic environment specified below. The user of EverGo should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the Device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance**
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	$d = 1.2\sqrt{P}$ 150 kHz to 80 MHz
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	10 V/m [c]	$d = 3.5\sqrt{P}$ 80 MHz to 800 MHz $d = 7\sqrt{P}$ 800 MHz to 2.5 GHz where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range. [b] Interference may occur in the vicinity of equipment marked with the following symbol:

Note 1:	At 80 MHz and 800 MHz, the higher frequency range applies.
Note 2:	These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

a	Field strength from fixed transmitters such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Device is used exceeds the applicable RF compliance level above, the Device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Device.
b	Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.
c	EverGo incorporates a robust design and conforms with Radiated RF Immunity Test up to 10 V/m between 80 MHz and 2.5 GHz while the test requirement is 3 V/m.

Recommended Separation Distance Between Portable and Mobile RF Communication Equipment and the Device

EverGo is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The user of EverGo can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communication equipment (transmitters) and EverGo as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter (Watts)	Separation Distance According to Frequency of Transmitter (meters)		
	150 kHz to 80 MHz $d = 1.2\sqrt{P}$	80 MHz to 800 MHz $d = 3.5\sqrt{P}$	800 MHz to 2.5 GHz $d = 7\sqrt{P}$
0.01	0.12	0.35	0.7
0.1	0.38	1.1	2.2
1	1.2	3.5	7
10	3.8	11	22
100	12	35	70

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power of the transmitter manufacturer.

Note 1:	At 80 MHz and 800 MHz, the higher frequency range applies.
Note 2:	These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Limited Warranty

Respironics, Inc. ("Respironics") warrants the EverGo™ Portable Oxygen Concentrator System (the "Product") as set forth in the following paragraphs.

Limited Warranty
Respironics warrants that the Product, except as otherwise stated herein, is free from defects in materials and workmanship under normal and proper use and when correctly maintained in accordance with applicable instructions, for a period of two (2) years from the date of shipment by Respironics to the original purchaser (the "Warranty Period").

Products Not Under Warranty
Accessories and replacement parts, including, but not limited to, filters and fuses, are not covered under this warranty. However, Respironics warrants that the battery in the Product will be free from defects in material and workmanship, under normal and proper use and when correctly maintained in accordance with applicable instructions, for a period of 90 days from the date of shipment by Respironics to the original purchaser. This warranty does not apply to batteries that are dropped, misused, altered or otherwise damaged after they are shipped.

Limitations
If any Product purchased from Respironics fails to conform to the warranties set forth herein during the Warranty Period, as determined by Respironics in its sole discretion, Respironics may discharge its warranty obligation by repairing or replacing the Product, in Respironics' sole discretion. This may be accomplished by installing new or remanufactured assemblies or components, or by other repairs deemed appropriate in the sole discretion of Respironics. The choice of repair or replacement by Respironics shall be the sole and exclusive remedy of the original purchaser. Respironics reserves the right, in its sole discretion, to refund the purchase price in lieu of repair or replacement of the Product. In no event shall Respironics' maximum liability under these warranties exceed the price paid to Respironics by the original purchaser for the Product.

Conditions
This warranty does not cover damage or injury whether to the Product or to personal property or persons caused by accident, misuse, abuse, negligence, failure to install in accordance with Respironics' installation instructions, failure to operate under conditions of normal use and in accordance with the terms of the operating manual and instructions, failure to maintain in accordance with the applicable service manuals, or alteration or any defects not related to materials or workmanship of the Product. This warranty does not cover damage which may occur in shipment. This warranty does not apply to any Product or individual part of a Product that may have been repaired or altered by anyone other than Respironics or an authorized Respironics service center. This warranty does not apply to any Product which is not purchased new.

Exclusions of Warranties
EXCEPT AS SET FORTH IN THIS LIMITED WARRANTY, RESPIRONICS MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, REGARDING THE PRODUCT, ITS QUALITY OR PERFORMANCE. RESPIRONICS SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL RESPIRONICS BE LIABLE FOR THE COST OF PROCUREMENT OF SUBSTITUTE PRODUCTS OR FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY OR INCIDENTAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, COMMERCIAL LOSS OR LOST REVENUES), FOR ANY CAUSE OF ACTION, WHETHER IN CONTRACT OR TORT, AND WHETHER OR NOT RESPIRONICS WAS AWARE OR SHOULD HAVE BEEN AWARE OF THE POSSIBILITY OF THESE DAMAGES. EXCEPT FOR THE OBLIGATIONS UNDER THIS LIMITED WARRANTY, RESPIRONICS SHALL NOT HAVE ANY OBLIGATION OR LIABILITY FOR ANY OTHER LOSS, DAMAGE OR INJURY RESULTING DIRECTLY OR INDIRECTLY FROM THE PRODUCT. PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THE WARRANTIES SET FORTH IN THIS DOCUMENT SHALL BE AS PROVIDED IN THE PARAGRAPH DESCRIBING LIMITATIONS.

Purchaser is cautioned that no person or entity is authorized to make any warranties on behalf of Respironics and any such alleged warranties are hereby disclaimed by Respironics.

Respironics, Inc.
1001 Murry Ridge Lane
Murrysville, PA 15668
USA

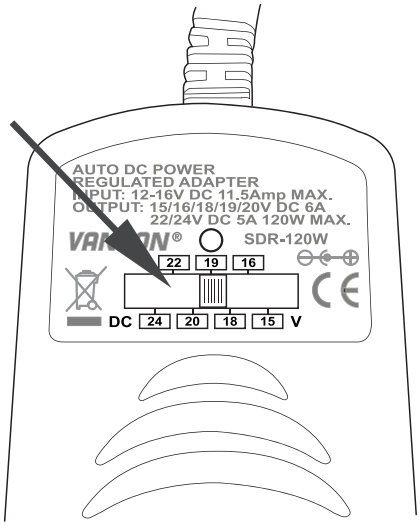
ADDENDUM TO THE EVERGO USER MANUAL

Page 11
To run the device using the DC Power from an automobile, see page 30 (Traveling with your system).

Page 30: By Motor Vehicle
Section: Traveling with your system

Use the EverGo DC power cord to plug the EverGo unit into the vehicle's cigarette lighter or DC power outlet. When using the DC power cord, you will be able to run the EverGo device and charge its batteries.

Caution: Make sure the vehicle has been started before plugging in your DC power cord. If you operate the EverGo system using the DC power cord while the vehicle engine is turned off, you could inadvertently drain the vehicle's battery.



Follow these additional instructions:

1. Ensure that the switch on the DC cord transformer is set to 19 (volts) (see illustration).

2. Connect the DC power cord to the vehicle's DC electrical output.

3. Connect the DC power cord to the EverGo power inlet.

4. Turn on the EverGo.

Note: When the automobile power is properly connected, the green transformer LED should be illuminated. If the LED does not illuminate, the DC power cord fuse should be checked. To access the fuse, rotate the plastic tip at the end of the cigarette lighter plug counterclockwise. If the fuse is blown or you are unsure, replace the fuse (3AG, 15 AMP, SLO-BLOW).

Page 32: Specifications

DC Power

Input:	12 - 15V
Output	19V, 5.5A max

Manufactured for:

Respironics Inc.
1001 Murry Ridge Lane
Murrysville, PA 15668 USA

EC REP Respironics Deutschland
Gewerbestrasse 17
82211 Herrsching, Germany

CE 0123

1067620
NS 9/28/09